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## Diabetes

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**Definition:** Respondents ever told by a doctor that they have diabetes.

### Prevalence of Diabetes

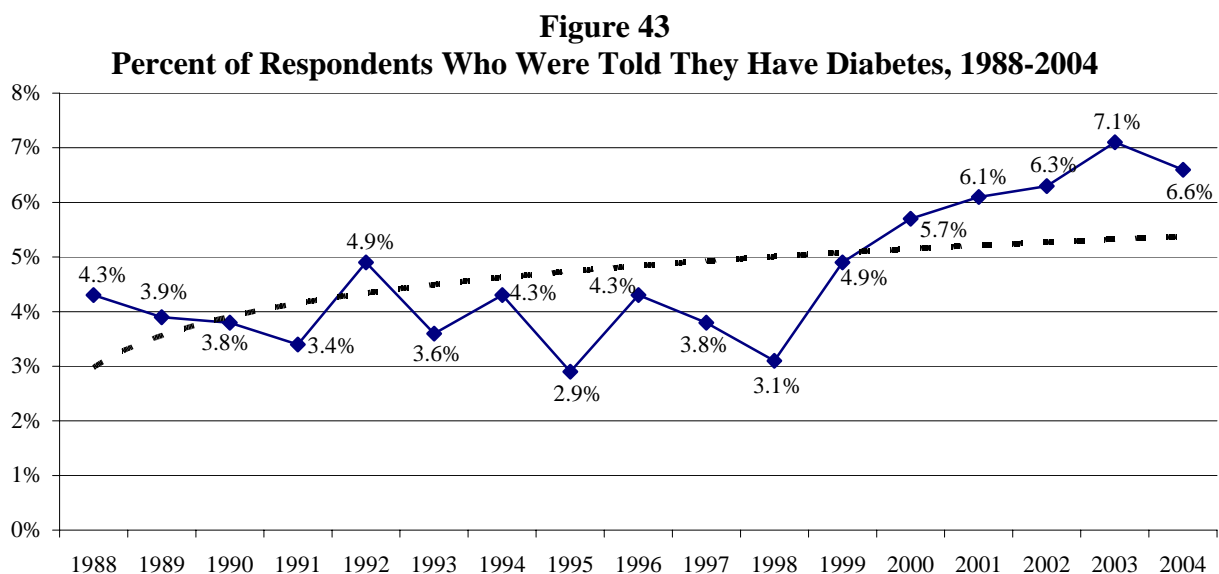
- South Dakota 6.6%
- Nationwide median 7.0%

### Healthy People 2010 Objective

There was no stated Healthy People 2010 Objective for having diabetes.

### Trend Analysis

Since this question was first asked in 1988, the percent of respondents who stated they were told they had diabetes has increased from 4.3 percent in 1988 to a high of 7.1 percent in 2003. However, in 2004 the percent of respondents who were told they have diabetes decreased to 6.6 percent.



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1988-2004

### Demographics

- Gender**      There are no significant gender differences in diagnosed diabetes observed from the available data.
- Age**          The prevalence of diagnosed diabetes generally increases as age increases. This includes significant increases as the 45-54, 55-64, and 65-74 age groups are reached.
- Race**        American Indians exhibit a significantly higher prevalence of diagnosed diabetes than whites.

<b>Region</b>	The American Indian counties region demonstrates a very high prevalence of diagnosed diabetes, while the southeast, northeast, and west regions show a very low prevalence.
<b>Household Income</b>	The prevalence of diagnosed diabetes generally decreases as household income increases.
<b>Education</b>	Diagnosed diabetes decreases as education increases. This decrease is more evident in females than males and includes a significant decrease for females as a high school education is achieved.
<b>Employment Status</b>	Those who are retired or unable to work demonstrate a very high prevalence of diagnosed diabetes, while those who are employed for wages, self-employed, or unemployed show a very low prevalence.
<b>Marital Status</b>	Those who are divorced, separated, or widowed exhibit a very high prevalence of diagnosed diabetes, while those who have never been married show a very low prevalence.

**Table 67**  
**Respondents Who Were Told They Have Diabetes, 2004**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Total</b>	<b>6,137</b>	<b>6.6</b>	<b>(5.9-7.3)</b>	<b>2,522</b>	<b>6.8</b>	<b>(5.8-7.9)</b>	<b>3,615</b>	<b>6.3</b>	<b>(5.5-7.3)</b>
<b>Age</b>									
18-24	338	1.4	(0.5-3.7)	149	0.0	-	189	2.9	(1.1-7.4)
25-34	788	1.7	(0.9-3.2)	336	1.8	(0.7-4.6)	452	1.6	(0.7-3.7)
35-44	1,033	2.7	(1.8-4.0)	430	2.9	(1.5-5.2)	603	2.6	(1.6-4.2)
45-54	1,279	5.9	(4.5-7.7)	568	6.3	(4.1-9.5)	711	5.5	(3.9-7.7)
55-64	965	11.4	(9.3-13.9)	406	12.3	(9.1-16.4)	559	10.6	(8.1-13.7)
65-74	885	16.9	(14.2-19.9)	367	20.3	(16.0-25.4)	518	13.9	(10.9-17.7)
75+	829	14.8	(12.2-17.9)	261	18.1	(13.3-24.0)	568	12.8	(10.0-16.2)
<b>Race</b>									
White	5,489	5.9	(5.3-6.6)	2,272	6.3	(5.3-7.4)	3,217	5.6	(4.8-6.5)
American Indian	435	18.6	(13.8-24.6)	164	19.9	(11.9-31.4)	271	17.6	(12.6-24.0)
<b>Region</b>									
Southeast	1,516	5.6	(4.6-6.9)	625	6.4	(4.8-8.5)	891	4.9	(3.7-6.5)
Northeast	1,393	6.4	(5.1-8.0)	559	6.8	(4.8-9.6)	834	6.1	(4.6-7.9)
Central	1,150	7.8	(6.3-9.6)	464	7.2	(5.3-9.8)	686	8.4	(6.3-11.0)
West	1,433	6.8	(5.5-8.4)	603	6.6	(4.9-9.0)	830	7.0	(5.2-9.4)
American Indian Counties	645	10.8	(8.5-13.7)	271	9.9	(6.6-14.5)	374	11.8	(8.8-15.7)
<b>Household Income</b>									
Less than \$10,000	307	13.9	(10.3-18.4)	*	*	*	*	*	*
\$10,000-\$14,999	369	15.1	(11.4-19.9)	102	13.8	(8.0-22.9)	267	15.8	(11.3-21.7)
\$15,000-\$19,999	507	9.6	(6.6-13.7)	189	8.5	(5.2-13.8)	318	10.4	(6.2-17.0)
\$20,000-\$24,999	674	9.0	(6.9-11.9)	263	12.0	(8.2-17.2)	411	6.3	(4.3-9.2)
\$25,000-\$34,999	983	7.2	(5.6-9.1)	435	7.0	(4.9-9.8)	548	7.4	(5.3-10.2)
\$35,000-\$49,999	1,044	4.7	(3.5-6.2)	474	5.5	(3.8-8.1)	570	3.7	(2.4-5.6)
\$50,000-\$74,999	911	3.3	(2.2-5.0)	408	4.5	(2.5-7.8)	503	2.1	(1.3-3.6)
\$75,000+	720	4.2	(2.9-6.1)	379	4.8	(3.0-7.5)	341	3.5	(1.8-6.4)
<b>Education</b>									
8th Grade or Less	258	16.9	(12.4-22.6)	131	16.8	(11.0-25.0)	127	17.1	(11.0-25.6)
Some High School	322	9.5	(6.6-13.4)	136	5.9	(3.0-11.1)	186	13.4	(8.6-20.1)
High School or G.E.D.	2,021	6.7	(5.5-8.0)	860	6.9	(5.3-8.9)	1,161	6.4	(4.9-8.3)
Some Post-High School	1,740	6.3	(5.2-7.6)	648	6.3	(4.6-8.7)	1,092	6.2	(4.9-7.8)
College Graduate	1,783	5.2	(4.2-6.5)	742	6.1	(4.4-8.3)	1,041	4.4	(3.2-5.9)

**Table 67 (continued)**  
**Respondents Who Were Told They Have Diabetes, 2004**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>Employment Status</b>									
Employed for Wages	3,052	3.9	(3.2-4.8)	1,251	3.9	(2.9-5.2)	1,801	3.9	(2.9-5.1)
Self-employed	829	5.1	(3.6-7.0)	546	5.7	(3.9-8.4)	283	3.5	(2.0-6.1)
Unemployed	147	6.2	(3.2-11.7)	*	*	*	*	*	*
Homemaker	288	7.7	(4.9-11.9)	*	*	*	*	*	*
Student	134	0.0	-	*	*	*	*	*	*
Retired	1,500	16.3	(14.2-18.6)	529	20.6	(16.9-24.8)	971	13.1	(10.9-15.6)
Unable to Work	184	19.5	(13.8-26.9)	*	*	*	*	*	*
<b>Marital Status</b>									
Married/Unmarried Couple	3,651	6.0	(5.2-6.9)	1,573	7.2	(5.9-8.7)	2,078	4.8	(3.9-6.0)
Divorced/Separated	817	9.9	(7.8-12.5)	355	8.5	(5.8-12.2)	462	11.2	(8.1-15.1)
Widowed	890	14.8	(12.4-17.5)	164	19.1	(13.3-26.6)	726	13.7	(11.2-16.6)
Never Married	766	3.4	(2.4-4.8)	426	3.2	(1.9-5.1)	340	3.8	(2.2-6.3)

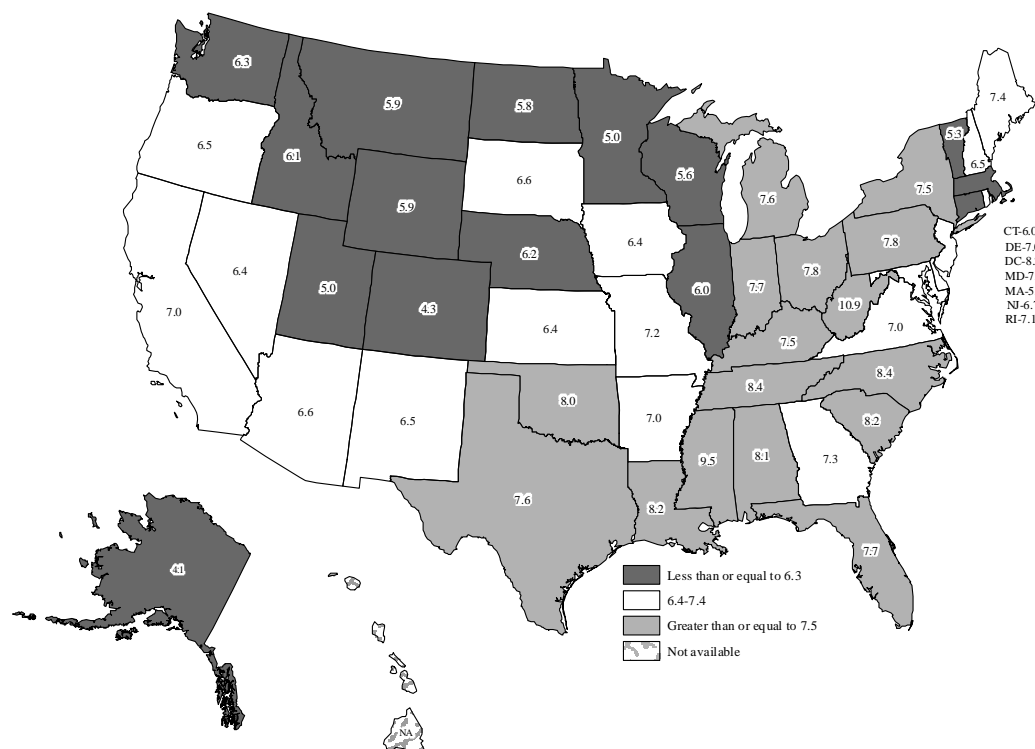
Note: \*Results based on sample sizes less than 100 have been suppressed

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2004

## National Statistics

The national median for respondents who were told they have diabetes was 7.0 percent. South Dakota had 6.6 percent of respondents who were told they have diabetes. Alaska had the lowest percent of respondents who were told they have diabetes with 4.1 percent, while West Virginia had the highest percent of respondents who were told they have diabetes with 10.9 percent.

**Figure 44**  
**Nationally, Respondents Who Were Told They Have Diabetes, 2004**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2004

## Further Analysis

Following are data illustrating the percent of those who were told they have diabetes for various health behaviors and conditions. For example, 21.1 percent of respondents who stated they have fair or poor health have diabetes, while 4.5 percent of respondents who stated they have excellent, very good, or good health have diabetes.

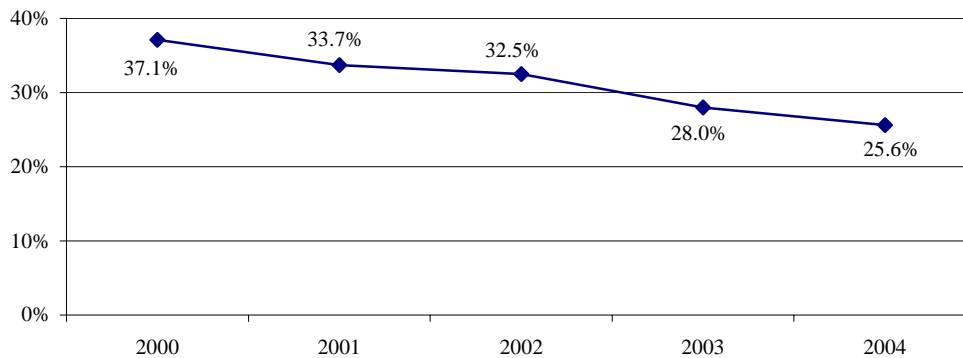
<b>Table 68</b> <b>Have Diabetes for Selected Health Behaviors and Conditions, 2004</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% Diabetes</b>	<b>95% CI</b>
Fair or Poor Health Status	957	21.1	18.2-24.4
Excellent, Very Good, or Good Health Status	5,166	4.5	3.9-5.1
Physical Health Not Good for 30 Days of the Past 30	394	19.4	15.4-24.1
Physical Health Not Good for 0-29 Days of the Past 30	5,689	5.8	5.1-6.5
Mental Health Not Good for 20-30 Days of the Past 30	347	11.3	7.3-17.1
Mental Health Not Good for 0-19 Days of the Past 30	5,727	6.2	5.6-6.9
Usual Activities Unattainable for 10-30 Days of the Past 30	395	14.5	11.1-18.8
Usual Activities Unattainable for 0-9 Days of the Past 30	5,721	6.0	5.4-6.7
Obese (BMI = 30.0+)	1,544	12.6	10.9-14.6
Overweight (BMI = 25.0-29.9)	2,265	6.3	5.4-7.5
Recommended Weight (BMI = 18.5-24.9)	2,045	2.8	2.1-3.8
No Leisure Time Physical Activity	1,321	9.3	7.7-11.3
Leisure Time Physical Activity	4,813	5.9	5.2-6.7
Current Smoker	1,221	5.9	4.6-7.5
Former Smoker	1,607	9.9	8.3-11.7
Never Smoked	3,301	5.4	4.7-6.3
Drank Alcohol in Past 30 Days	3,283	3.8	3.1-4.5
No Alcohol in Past 30 Days	2,817	10.6	9.3-12.0
Binge Drinker	794	2.2	1.3-3.6
Not a Binge Drinker	5,287	7.5	6.8-8.3
Heavy Drinker	207	4.0	1.8-8.8
Not a Heavy Drinker	5,856	6.7	6.0-7.4
No Mammogram within Past Two Years (40+)	656	8.1	6.1-10.5
Mammogram within Past Two Years (40+)	2,004	9.0	7.7-10.4
No Clinical Breast Exam within Past Two Years	684	7.0	5.2-9.3
Clinical Breast Exam within Past Two Years	2,883	6.0	5.2-7.1
Insufficient Cervical Cancer Screening	401	6.1	4.0-9.1
Sufficient Cervical Cancer Screening	2,245	4.8	3.9-5.9
No PSA Test within Past Two Years (40+)	803	5.9	4.4-7.9
PSA Test within Past Two Years (40+)	969	14.1	11.9-16.8
No Digital Rectal Exam within Past Two Years (40+)	817	6.9	5.2-9.1
Digital Rectal Exam within Past Two Years (40+)	1,009	13.4	11.2-15.9
No Blood Stool Test within Past Two Years (50+)	2,418	11.8	10.4-13.3
Blood Stool Test within Past Two Years (50+)	889	13.8	11.5-16.6
Never Had Sigmoidoscopy or Colonoscopy (50+)	1,653	11.5	9.9-13.3
Ever Had Sigmoidoscopy or Colonoscopy (50+)	1,674	13.2	11.4-15.2
Haven't Been to the Dentist in the Past 12 Months	1,848	9.7	8.2-11.4
Been to the Dentist in the Past 12 Months	4,278	5.4	4.7-6.1
Not Taking any Precautions Against West Nile Virus	1,909	7.0	5.9-8.3
Taking Precautions Against West Nile Virus	4,059	6.3	5.5-7.2
No Health Insurance (18-64)	369	3.4	1.9-6.2
Health Insurance (18-64)	3,905	4.4	3.7-5.1

<b>Table 68 (continued)</b> <b>Have Diabetes for Selected Health Behaviors and Conditions, 2004</b>			
<b>Health Behavior or Condition</b>	<b># Respondents</b>	<b>% Diabetes</b>	<b>95% CI</b>
Employer Based Health Insurance Coverage (18-64)	2,676	3.0	2.4-3.8
Private Health Insurance Plan (18-64)	531	3.1	1.8-5.1
Medicare (18-64)	117	16.4	10.5-24.9
Medicaid or Medical Assistance (18-64)	111	17.3	9.6-29.1
The Military, CHAMPUS, TriCare, or the VA (18-64)	185	7.8	4.5-13.1
The Indian Health Service (18-64)	236	11.3	7.3-17.1
No Flu Shot (65+)	419	10.5	7.6-14.3
Flu Shot (65+)	1,290	17.5	15.2-20.0
No Pneumonia Shot (65+)	579	9.5	7.0-12.6
Pneumonia Shot (65+)	1,113	19.0	16.5-21.8
Current Asthma	441	12.0	9.1-15.7
Former Asthma	191	6.1	3.4-10.7
Never Had Asthma	5,483	6.1	5.4-6.8
Previously Had a Heart Attack	370	23.5	18.9-28.7
Never Had a Heart Attack	5,621	5.7	5.1-6.4
Have Angina or Coronary Heart Disease	401	25.1	20.5-30.4
Do not Have Angina or Coronary Heart Disease	5,571	5.5	4.9-6.1
Previously Had a Stroke	193	19.0	13.6-25.9
Never Had a Stroke	5,795	6.2	5.6-6.9
Physical, Mental, or Emotional Disability	1,255	12.7	10.8-14.9
No Physical, Mental, or Emotional Disability	4,805	5.2	4.6-5.9
Disability with Special Equipment Needed	449	20.1	16.1-24.8
No Disability with Special Equipment Needed	5,614	5.7	5.1-6.4
Four or More Hours of TV Watched per Day	1,425	10.5	8.9-12.4
Less Than Four Hours of TV Watched per Day	4,520	5.5	4.8-6.3
Sick from Poor Indoor Air Quality in Past Year	1,013	6.6	5.1-8.6
Not Sick from Poor Indoor Air Quality in Past Year	5,077	6.5	5.8-7.3
Sick from Outdoor Air Pollution in Past Year	425	8.7	6.4-11.8
Not Sick from Outdoor Air Pollution in Past Year	5,687	6.4	5.7-7.1
Firearm in Household	3,372	5.7	5.0-6.6
No Firearms in Household	2,530	7.8	6.7-9.0
Loaded and Unlocked Firearm in Household	274	7.3	4.5-11.7
No Loaded and Unlocked Firearms in Household	5,590	6.5	5.8-7.2
No Birth Control (females 18-44 & males 18-59)	333	4.2	2.4-7.1
Birth Control (females 18-44 & males 18-59)	1,686	3.4	2.5-4.5
Never Been Tested for HIV (18-64)	3,092	4.0	3.3-4.9
Been Tested for HIV (18-64)	1,155	4.8	3.7-6.4
Sunburn in Past 12 Months	2,172	3.7	2.9-4.6
No Sunburn in Past 12 Months	3,955	8.7	7.8-9.7
Military Veteran	1,011	12.0	10.0-14.5
Not a Military Veteran	5,112	5.4	4.8-6.1

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2004

Figure 45, on the next page, displays the percent of respondents who are taking insulin for their diabetes. Since 2000, the percent of respondents taking insulin has been decreasing and reached a low of 25.6 percent of respondents taking insulin in 2004.

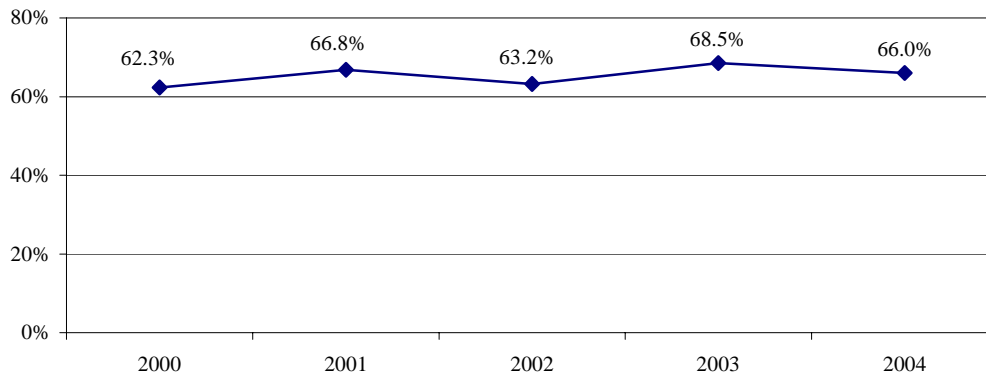
**Figure 45**  
**Respondents Who Are Taking Insulin, 2000-2004**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

Figure 46, below, displays the percent of respondents taking pills for their diabetes. The percent of respondents taking pills for their diabetes decreased from 68.5 percent in 2003 to 66 percent in 2004.

**Figure 46**  
**Respondents Who Are Now Taking Diabetes Pills, 2000-2004**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

From 2003 to 2004, the percent of respondents who only took diabetes pills increased from 54.7 percent in 2003 to 56.5 percent in 2004. The percent of respondents who only took insulin increased from 14.3 percent in 2003 to 16.2 percent in 2004. Table 69 below displays this.

<b>Table 69</b>					
<b>Respondents Taking a Combination of Insulin and Diabetes Pills, 2000-2004</b>					
	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
<b>Number of respondents</b>	<b>530</b>	<b>450</b>	<b>344</b>	<b>354</b>	<b>287</b>
Insulin and diabetes pills	9.5%	13.8%	12.4%	12.9%	12.5%
Insulin only	16.2%	14.3%	20.2%	20.7%	24.5%
Diabetes pills only	56.5%	54.7%	50.8%	53.9%	49.7%
Neither	17.8%	17.2%	16.6%	12.5%	13.2%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

Since 2000, the majority of respondents stated that they check their blood for glucose or sugar one or more times per day as illustrated below in Table 70. In 2004, the second highest response for how many times respondents check their blood for glucose or sugar was one to two times per week with 16.7 percent.

<b>Table 70</b>					
<b>Number of Times Respondents Check Their Blood for Glucose or Sugar, 2000-2004</b>					
	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
<b>Number of respondents</b>	<b>526</b>	<b>448</b>	<b>342</b>	<b>348</b>	<b>277</b>
1+ times per day	60.8%	59.6%	60.1%	57.6%	58.1%
3-6 times per week	8.6%	9.4%	12.6%	10.7%	8.4%
1-2 times per week	16.7%	12.9%	11.5%	12.0%	14.5%
1-4 times per month	6.4%	7.2%	6.5%	5.9%	5.3%
< 1 time per month	4.1%	6.3%	4.4%	5.1%	5.6%
Never	3.4%	4.6%	4.8%	8.6%	8.1%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

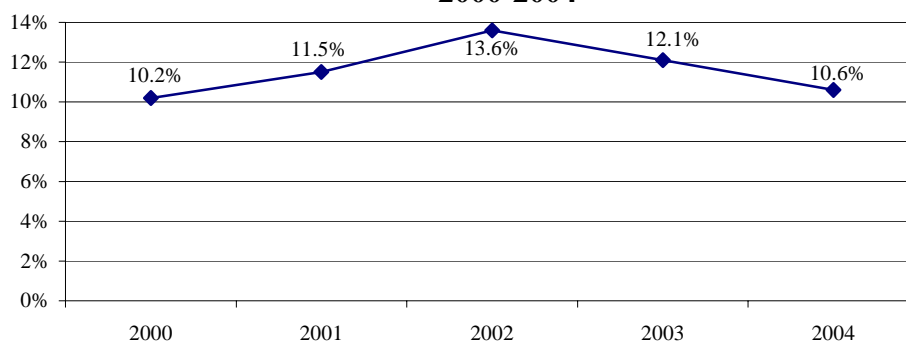
Since 2000, the majority of respondents stated that they check their feet one or more times per day as illustrated below in Table 71. In 2004, 78.4 percent of the respondents stated they check their feet one or more times per day, while 70.3 percent of the respondents check their feet one or more times per day in 2000.

<b>Table 71</b>					
<b>Number of Times Respondents Check Their Feet for Any Sores or Irritations, 2000-2004</b>					
	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
<b>Number of respondents</b>	<b>521</b>	<b>445</b>	<b>340</b>	<b>337</b>	<b>266</b>
1+ times per day	78.4%	79.1%	78.8%	74.0%	70.3%
3-6 times per week	2.8%	0.9%	4.8%	2.7%	3.9%
1-2 times per week	8.2%	8.9%	8.5%	10.1%	10.3%
1-4 times per month	2.1%	4.0%	2.1%	3.9%	5.0%
< 1 time per month	2.3%	1.5%	0.5%	2.2%	2.6%
Never	6.2%	5.6%	5.3%	7.1%	7.8%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

Figure 47, below, illustrates that the percent of respondents with sores on their feet that took more than four weeks to heal had been on the increase from 2000 until 2002. However, since 2002 the percent of respondents with sores on their feet that took more than four weeks to heal has been decreasing from 13.6 percent in 2002 to 10.6 percent in 2004.

**Figure 47**  
**Respondents With Sores That Took More Than Four Weeks to Heal, 2000-2004**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

Since 2000, the majority of respondents stated that they had seen a health professional four to six times a year. In 2004, 37.2 percent of the respondents stated they saw a health professional four to six times a year, while in 2000, 32.2 percent of the respondents stated they saw a health professional four to six times a year as illustrated below in Table 72.

<b>Table 72</b> <b>Number of Times Respondents Saw a Doctor, Nurse, or Other Health Professional for Their Diabetes in the Past Year, 2000-2004</b>					
	2004	2003	2002	2001	2000
<b>Number of respondents</b>	<b>524</b>	<b>447</b>	<b>338</b>	<b>342</b>	<b>271</b>
13+	2.6%	1.6%	1.8%	1.3%	1.6%
7-12	10.9%	11.9%	9.6%	9.5%	14.2%
4-6	37.2%	44.1%	43.5%	43.0%	32.2%
2-3	29.7%	27.3%	29.0%	25.1%	31.5%
1	12.8%	8.3%	11.0%	14.3%	12.0%
0	6.9%	6.8%	5.1%	6.7%	8.4%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

In 2004, 35.8 percent of the respondents stated they had a health professional check their hemoglobin A1c four to six times a year, while in 2000, 26.9 percent of the respondents stated they had a health professional check their hemoglobin A1c four to six times a year as illustrated below in Table 73.

<b>Table 73</b> <b>Number of Times Respondents Had Hemoglobin “A1c” Checked by Doctor, Nurse, or Other Health Professional in the Past Year, 2000-2004</b>					
	2004	2003	2002	2001	2000
<b>Number of respondents</b>	<b>503</b>	<b>431</b>	<b>321</b>	<b>310</b>	<b>251</b>
13+	0.7%	1.1%	0.3%	0.4%	0.4%
7-12	4.4%	5.4%	3.4%	2.6%	3.5%
4-6	35.8%	40.0%	36.8%	37.4%	26.9%
2-3	34.9%	34.9%	35.3%	34.2%	39.2%
1	13.3%	13.2%	18.7%	16.8%	18.4%
0	8.6%	4.4%	4.2%	6.9%	9.7%
Never heard of test	2.3%	1.0%	1.2%	1.7%	1.9%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

In 2004, 26.5 percent of the respondents stated they had a health professional check their feet two to three times a year, while in 2000, 21.8 percent of the respondents stated they had a health professional check their feet two to three times a year as illustrated below in Table 74.

<b>Table 74</b> <b>Number of Times Respondents Had a Health Professional Check Their Feet for Any Sores or Irritations, 2000-2004</b>					
	2004	2003	2002	2001	2000
<b>Number of respondents</b>	<b>525</b>	<b>445</b>	<b>336</b>	<b>345</b>	<b>265</b>
13+	1.3%	1.1%	1.8%	1.0%	0.6%
7-12	5.7%	4.1%	4.2%	5.3%	9.5%
4-6	18.4%	25.2%	26.6%	26.5%	24.0%
2-3	26.5%	23.2%	24.4%	20.8%	21.8%
1	19.3%	20.8%	22.9%	20.5%	17.9%
0	28.8%	25.6%	20.0%	25.9%	26.2%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004



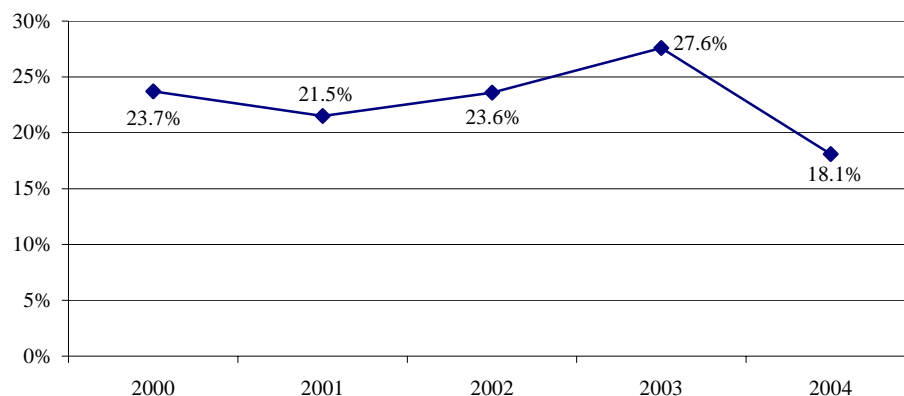
Since 2000, the majority of respondents stated they have had an annual eye exam where their pupils were dilated. In 2004, 75.8 percent of the respondents stated they had an annual eye exam where their pupils were dilated, compared to 77.1 percent in 2000 as shown below in Table 75.

<b>Table 75</b>					
<b>Last Time Respondents Had an Eye Exam With Pupils Dilated, 2000-2004</b>					
	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
<b>Number of respondents</b>	<b>530</b>	<b>451</b>	<b>339</b>	<b>348</b>	<b>283</b>
Within the 12 past months	75.8%	78.6%	77.3%	77.6%	77.1%
1-2 years ago	10.5%	11.3%	13.1%	10.9%	11.3%
Two or more years ago	11.3%	7.2%	7.8%	9.0%	9.6%
Never	2.4%	2.9%	1.9%	2.5%	2.0%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

Figure 48, below, illustrates respondents who were told that diabetes affected their eyes or that they have retinopathy. In 2004, 18.1 percent of the respondents had been told that diabetes has affected their eyes or they have retinopathy, compared to 23.7 percent in 2000.

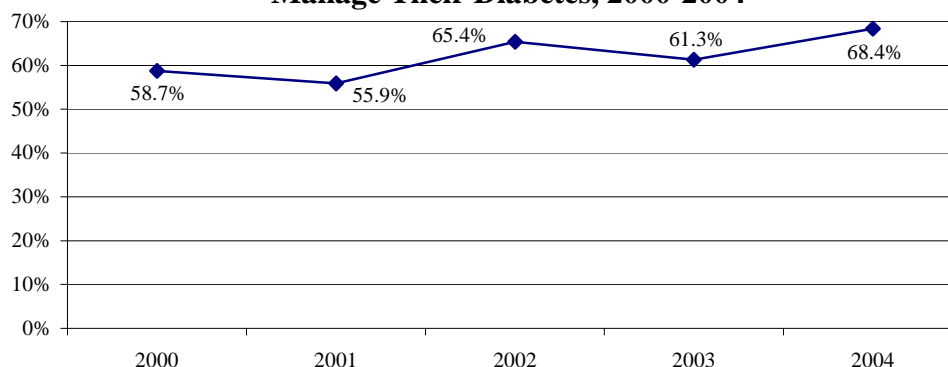
**Figure 48**  
**Respondents Told That Diabetes Has Affected Eyes or They Have Retinopathy, 2000-2004**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

Figure 49, below, displays the respondents that have taken a course or class on how to manage their diabetes. In 2004, 68.4 percent of the respondents had taken a course or class on how to manage their diabetes, up from 58.7 percent in 2000.

**Figure 49**  
**Respondents Who Have Taken a Course or Class on How to Manage Their Diabetes, 2000-2004**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2004

Out of the 3,060 children that were surveyed, 17 were diagnosed with diabetes by a doctor for a rate of 5.6 per 1,000 children.